Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

ORIGINAL

In the Matter of	)	
Amendment of Section 73.622(b), Table of Allotments, Digital Television Broadcast Stations (Tuscaloosa, Alabama)	)	MM Docket No. 01- RM-

To: Chief, Video Services Division

PETITION FOR RULEMAKING

TV Alabama, Inc. ("TV Alabama"), licensee of television station WCFT-TV NTSC Channel 33, Tuscaloosa, Alabama, by its undersigned attorneys and pursuant to Sections 1.401 and 73.623 of the Federal Communications Commission's rules, hereby petitions for rulemaking to amend the Digital Television ("DTV") Table of Allotments, 47 C.F.R. § 73.622(b). Specifically, TV Alabama requests that the Commission substitute Channel 5 for Channel 34 as the DTV channel assigned to WCFT-DT. Under this proposal, the DTV Table of Allotments would be amended as follows:

Community	Present	Proposed
Tuscaloosa, Alabama	34	5

For the reasons set forth below, and as demonstrated by the attached Engineering Statement of Cavell, Mertz & Davis, Inc. ("Engineering Statement"), TV Alabama submits that the proposed amendment to the DTV Table of Allotments is consistent with the Commission's rules and is in the public interest.

1. As set forth in the attached Engineering Statement, the proposed DTV channel substitution is fully consistent with the requirements of Section 73.623(c)(1). Specifically, the operation of WCFT-DT on Channel 5 satisfies the Commission's 2%-10% *de minimis* interference test. No analog or DTV station will receive incremental interference exceeding two percent of the population currently served. In addition, the proposed channel change will not result in any new interference to stations already experiencing maximum DTV interference (i.e., interference in excess of ten percent of their current NTSC population), nor will it result in interference that would cause another station to begin experiencing DTV interference to greater than ten percent of the population currently served. Moreover, to the extent such protection is required, there will be no impermissible interference to protected Class A television stations.

2. DTV Channel 5 can be allotted to WCFT-DT using the station's authorized NTSC transmitter site in full compliance with the principal community coverage requirements of Section 73.625(a).

3. The proposed channel substitution would benefit the public interest for several reasons. First, operation on DTV Channel 5 as opposed to DTV Channel 34 would improve predicted signal coverage for viewers in the Birmingham DMA. Presently, WCFT-TV operates on NTSC Channel 33. As demonstrated in the Engineering Statement, operation of WCFT-DT utilizing proposed DTV Channel 5 would achieve a nine percent predicted increase in interference-free population service over that of the current NTSC facility's licensed Grade B contour, as well as a nine percent predicted increase in interference-free population service over that of DTV Channel 34. TV Alabama submits that the public interest would be served by the more efficient use of the broadcast spectrum.

4. Second, TV Alabama would be able to complete the build-out of its DTV facilities earlier and at less cost on Channel 5. TV Alabama currently has a Petition for Rulemaking pending before the Commission to change the DTV channel allotment for WJSU, Anniston, Alabama, to Channel 9.[1] Upon grant of these Petitions, TV Alabama intends to build both DTV stations together, sharing both staff and resources. The unique combination of WCFT and WJSU offers simultaneous ABC network and local programming to the consolidated Birmingham-Tuscaloosa-Anniston Alabama market. The analog stations are marketed by their channel numbers as "ABC 33/40." TV Alabama has relied heavily on this branding concept since it created the combined station operation in 1996. This branding has resulted in the successful acceptance by viewers of either off-air signal depending on geographic location in the market. The introduction of digital stations on two additional channels already presents a significant marketing challenge in itself -- a challenge that will be exacerbated where one DTV station is in the UHF band and one is in the VHF band. This confusion can be eased significantly where both analog stations are UHF and both digital stations are VHF. When WJSU-DT is allocated to Channel 9, the DTV combined ABC channels can be marketed as "ABC-DT 5/9" while the analog stations will remain "ABC 33/40". This marketing scheme not only can ease the introduction of digital service in the combined market, but also facilitate the transition without confusion.

[1] See Amendment of Section 73.622(b), Table of Allotments, Digital Television Broadcast Stations (Anniston, Alabama), Petition for Rulemaking (filed April 18, 2001).

CONCLUSION

For the foregoing reasons, TV Alabama respectfully requests that the Commission initiate the rulemaking requested herein to substitute DTV Channel 5 for DTV Channel 34 as the digital television channel assigned to TV Alabama, Inc., Tuscaloosa, Alabama.

Respectfully submitted,

TV Alabama, Inc.

By: Jennifer Tatel
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Date: July 3, 2002

Engineering Statement
prepared for
TV Alabama, Inc.
WCFT-DT Tuscaloosa, Alabama
Ch. 5 5.4 kW (MAX-DA) 641 m

This engineering statement has been prepared on behalf of *TV Alabama, Inc. ("TV Alabama"),* licensee of WCFT-TV, NTSC Channel 33, Tuscaloosa, Alabama. In the Commission's Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders on Advanced Television ("*SMO&O*"),[1] DTV Channel 34 was allotted as a "paired" DTV Channel for WCFT-TV. The instant statement supports a *Petition for Rulemaking,* to propose the use of Channel 5 in lieu of Channel 34.

Discussion

An engineering review of the DTV allotments and NTSC assignments in the region surrounding Tuscaloosa showed that an alternate channel could be used for the Channel 34 DTV allotment. Detailed interference studies were conducted with respect to domestic NTSC and DTV allotments and facilities, in accordance with §73.623(c) (as required in the *SMO&O*). The studies showed that DTV Channel 5 could be used for WCFT-DT at 5.4 kW maximum effective radiated power (ERP) and an antenna height above average terrain (HAAT) of 641 meters.

The technical data for the proposed Channel 5 allotment are summarized below. The site specified is the same as that for the WCFT-DT authorized facility. The power and height combination is specified as shown (for the proposed "reference" point) as a basis to avoid interference to NTSC and DTV stations.

Summary Technical Data for Proposed DTV Channel 5

Coordinates (NAD-27)	33° 28' 48" N-Lat 87° 25' 50" W-Lon
Channel	5
Maximum Effective Radiated Power	5.4 kW (See **Table 1** for directional antenna relative field pattern)
Antenna Height	775 m AMSL 641 m HAAT

[1] See MM Docket 87-268, *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service,* FCC 98-315, released December 18, 1998.

NTSC and DTV Allocation Considerations

Criteria for evaluating the impact of DTV station proposals were released in the Commission's August 10, 1998 Public Notice entitled *"Additional Application Processing Guidelines for Digital Television."* In that Public Notice, the Commission's Mass Media Bureau stated that "interference to [NTSC stations and DTV stations and allotments] affecting less than 2 percent of the population they serve is considered to be *de minimis*. However, any interference is considered unacceptable (there is no amount considered to be *de minimis*) if the station to be protected already is receiving interference to more than 10 percent of the population it would otherwise serve...." The same Public Notice states that for DTV proposals, the determination of interference to NTSC and DTV facilities (as calculated per OET Bulletin 69) will be rounded to the nearest tenth of a percent. The August 10, 1998 Public Notice regarding the channel change proposed herein requires that interference criteria (as described above and in §73.623(c)) be utilized to evaluate the new channel facility's impact on NTSC and DTV.

Accordingly, a study was conducted to evaluate the change in interference to pertinent NTSC and DTV assignments that may be attributed to the proposed Channel 5 facility. A detailed interference study was conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, July 2, 1997 ("OET-69").[2] The interference study examined the net change in interference as experienced by DTV stations that would result from the proposal.

All stations considered in this study are listed in **Table 2**. As shown in **Table 2**, any increase in interference to NTSC and DTV facilities complies with the Commission's 2%/10% "*de minimis*" guidelines. No interference is predicted to any other NTSC or DTV station or allotment. Thus, this proposal is believed to be in compliance with Commission policy regarding DTV channel changes as they may affect NTSC and DTV stations. Accordingly, based on the results of this study, it is

[2]The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. Comparisons of various results of this computer program (run on a Sun processor) to the Commission's implementation of OET-69 show excellent correlation.

believed that there will be no impact to NTSC and DTV assignments as a result of the instant proposal.

It should be noted that there is a *Petition for Rulemaking* on file to operate WBIQ-DT, Birmingham, Alabama, 58.7 kilometers distant, on Channel 5 in lieu of the allotted Channel 53. However, the licensee of WBIQ has voluntarily withdrawn that proposal. Therefore, any predicted interference to WBIQ-DT by the proposed WCFT facility need not be considered.

Class A Television

An allocation study of possible conflicts was conducted with respect to Class A Television stations and LPTV stations that may be eligible for Class A status.[3] The study determined that the proposed WCFT-DT facility causes prohibited overlap to the protected contours of the following Class A stations, using the criteria of §73.623(c)(5):

Channel Status	Call Sign Service	City of License File Number	Latitude Longitude	Power	Distance Bearing
5-	WXFL-LP	FLORENCE AL	34 48 11.0	0.018	148.42
CP	CA	BPTVL 20000519AAJ	87 40 14.0		351.53
5Z	WBXM-CA	MONTGOMERY AL	32 22 07.0	0.700	161.96
CP	CA	BPTVA 20011106AAE	86 18 26.0		139.38
5Z	WBXM-CA	MONTGOMERY AL	32 22 07.0	0.019	161.96
LIC	CA	BLTVL 19940224JR	86 18 26.0		139.38

However, §73.623(c)(5)(iii) allows for the use of the terrain dependent Longley-Rice point-to-point propagation model, per OET-69, in support of a request for waiver of the Class A interference protection requirements. Accordingly, a study pursuant to OET-69 was conducted with respect to each of the Class A stations listed above.[4]

The results of this study are shown in **Table 3**. As shown in **Table 3**, any increase in interference to any of the Class A stations studied due to the proposed WCFT-DT is zero, when

[3]See June 2, 2000 Public Notice *Certificates of Eligibility for Class A Television Station Status*, DA 00-1224.

[4]The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein, except that the cell size is 1 km (which provides a finer resolution than the Commission's standard 2 km cell size).

rounded to the nearest whole percent. No other Class A stations would experience or cause interference with respect to the proposed WCFT-DT facility. Therefore, there will be no impact to Class A Television stations as a result of the instant proposal.

Service Area

The proposed WCFT-DT facility will serve a larger area and greater population than either the WCFT-TV Licensed NTSC Channel 33 facility or the WCFT-DT Channel 34 reference allotment. Specifically:

	Service Contour Field Strength (dBμ)	Area (sq. km)	Population (2000 Census)
Proposed Ch. 5	28.0	43,010	1,642,582
NTSC Ch. 33	63.6	37,223	1,506,749
DTV Reference Ch. 34	40.7	37,179	1,506,112

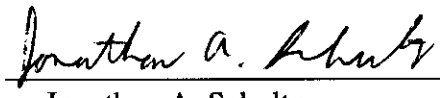
Since the instant proposal will increase the area and population served by WCFT-DT, it is believed that a grant of the instant proposal would serve the public interest.

Summary

It is proposed that DTV Channel 5 be allotted to Tuscaloosa, Alabama as a substitute for Channel 34. The substitution will not impact any NTSC or DTV facility. There is no conflict with Class A Television stations. The area and population served by WCFT-DT will be increased.

Certification

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief. Mr. Schultz is an associate in the firm of *Cavell, Mertz & Davis, Inc.*, holds a Bachelor of Science degree from the University of Rochester, and has previously submitted engineering exhibits to the Federal Communications Commission. His qualifications are a matter of record with that entity.



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July 3, 2002

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Table 1

ANTENNA HORIZONTAL PLANE RELATIVE FIELD PATTERN

prepared for

TV Alabama, Inc.

WCFT-DT Tuscaloosa, Alabama

Ch. 5 5.4 kW (MAX-DA) 641 m

Azimuth (° T)	Relative Field	Azimuth (° T)	Relative Field
0	0.643	170	0.772
10	0.582	180	0.894
15	0.575	190	0.973
20	0.574	200	1.000
25	0.575	210	0.973
30	0.582	220	0.894
40	0.643	230	0.772
50	0.772	240	0.643
60	0.894	250	0.582
70	0.973	255	0.575
80	1.000	260	0.574
90	0.973	265	0.575
100	0.894	270	0.582
110	0.772	280	0.643
120	0.643	290	0.772
130	0.582	300	0.894
135	0.575	310	0.973
140	0.574	320	1.000
145	0.575	330	0.973
150	0.582	340	0.894
160	0.643	350	0.772

Table 2

INTERFERENCE ANALYSIS RESULTS SUMMARY

prepared for

TV Alabama, Inc.

WCFT-DT Tuscaloosa, Alabama

Ch. 5 5.4 kW (MAX-DA) 641 m

DTV Facilities

Stations Considered	City, State Channel	Distance (km)	Baseline Population (1)	Calculated "Before" Service Population (2)	Calculated "After" Service Population (3)	--- Net "New" Interference --- ("2 percent" test) Population (4)	Percentage (5)	Percentage Reduction of Baseline Population ("10 percent" test) (6)
WBIQ-DT (PRM 2 kW)	Birmingham, AL 5	58.7	---------- withdrawn by applicant, evaluation not required ----------					

NTSC Facilities

Stations Considered	City, State Channel	Distance (km)	Baseline Population (1)	Calculated "Before" Service Population (2)	Calculated "After" Service Population (3)	--- Net "New" Interference --- ("2 percent" test) Population (4)	Percentage (5)	---Total Interference--- from DTV only ("10 percent" test) Population (7)	Percentage (8)
WAGA(TV) (LIC)	Atlanta, GA 5	289.5	3,585,087	3,441,585	3,420,686	20,899	0.58	20,899	0.58
WMC-TV (LIC)	Memphis, TN 5	293.6	1,453,282	1,362,282	1,355,891	6,391	0.44	23,056	1.59
WKRG-TV (LIC)	Mobile, AL 5	311.8	1,315,858	1,310,490	1,297,886	12,604	0.96	12,604	0.96
WTVF(TV) (LIC)	Nashville, TN 5	314.8	1,712,638	1,568,442	1,567,934	508	0.03	508	0.03
WBRC(TV)	Birmingham, AL	58.7	1,714,465	1,547,236	1,514,802	32,434	1.89	32,434	1.89

Table 2
INTERFERENCE ANALYSIS RESULTS SUMMARY

NTSC Facilities

Stations Considered	City, State Channel	Distance (km)	Baseline Population (1)	Calculated "Before" Service Population (2)	Calculated "After" Service Population (3)	--- Net "New" Interference --- ("2 percent" test) Population (4)	Percentage (5)	---Total Interference--- from DTV only ("10 percent" test) Population (7)	Percentage (8)
(LIC)	6								

Notes:

(1) For DTV stations, greater of NTSC or DTV Service Population, from FCC Table
For NTSC stations, total population within noise-limited contour

(2) Service population after reduction from terrain and interference losses, before consideration of proposal

(3) Service population after reduction from terrain and interference losses, considering proposal

(4) Net change in population receiving interference resulting from proposal, equals (2) minus (3). A negative number indicates a *reduction* in interference.

(5) Proposal's impact in terms of percentage, equals (4)/(1) times 100 percent: not to exceed *de minimis* limit of 2.0 percent

(6) Total interference to DTV stations: equals 100 percent minus [(3)/(1) X 100%]; proposal may not add interference above 10% total. Zero total interference is indicated if (3) is greater than (1).

(7) NTSC station total population subject to interference from DTV only sources (considering proposal)

(8) Proposal's impact to NTSC station in terms of percentage, equals (7)/(1) times 100 percent; proposal may not add interference above 10% total

The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice *"Additional Application Processing Guidelines for Digital Television"*

Table 3

CLASS A TELEVISION INTERFERENCE ANALYSIS RESULTS SUMMARY

prepared for

TV Alabama, Inc.

WCFT-DT Tuscaloosa, Alabama

Ch. 5 5.4 kW (MAX-DA) 641 m

Stations Considered	City, State Channel	Distance (km)	Baseline Population (1)	Service Population (2)	---- *Unique Interference from WCFT-DT* ---- Population (3)	Percentage (4)
WXFL-LP (CP 0.018 kW)	Florence, AL 5	148.4	34,668	34,894	0	0.00
WBXM-CA (LIC 0.019 kW)	Montgomery, AL 5	162.0	59,837	58,878	0	0.00
WBXM-CA (CP 0.7 kW)	Montgomery, AL 5	162.0	170,968	170,562	0	0.00

Notes:

(1) Total population within noise-limited contour

(2) Interference-free service population per OET-69 before consideration of proposal

(3) Net change in population receiving interference resulting from proposal

(4) Proposal's impact in terms of percentage, equals (3)/(1) times 100 percent: not to exceed zero when rounded to the nearest whole percent

The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice *"Additional Application Processing Guidelines for Digital Television"*